**Arden Syntax Implementation Guide**

**Release 3**

**Outline**

**Approved by the Arden Syntax WG on 2018-11-27**

NB: The outline of the Arden Syntax IG R2 is preserved for R3 with the addition of two new chapters:

1. Purpose

2. Notes and Disclaimer

3. Arden Syntax: Context and History

4. Syntax Description

4.1. Fundamentals

4.2. Language Concepts

4.2.1. Data Types

4.2.2. Statements

4.2.3. Expressions

4.2.4. Operators

5. Basic Tasks (by Example)

5.1. Sort a List of Objects

5.2. Convert String to DateTime

5.3. Calculate the Current Age in Years from a Given Birthday

5.4. MLM-to-MLM Interaction

6. Programming / Engineering Use Cases

6.1. Guidelines

7. System-Level Engineering Use Cases

7.1. Standards-Based Stack for Connecting Arden-Syntax-Based Applications to an EHR

7.2. Integrating CDS in PDMS with Minimal Effort

7.3. Integrating CDS in a Commercially Available PDMS Using Proprietary Interfaces

8. Clinical Use Cases

8.1. Drug‒Disease Interaction

8.2. Body Mass Index

8.3. Abnormal Test Result Detection

8.4. Detection of Possible Patient Deterioration

8.5. Least Squares Linear Regression

8.6. Calculate Creatinine Clearance and Glomerular Filtration Rate

8.7. Hepatitis A Immunization

9. Standard Data Models and Data Access: New (Author = Jenders)

10. Representation of Business Processes: New (Author = Haug)

11. Preview of Arden 3.0: The Curly-Braces Challenge and Other Standards

12. F.A.Q.

13. References